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CAPITAL FLIGHT AND EXTERNAL DEBT IN NIGERIA

S. IBI AJAYI

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Exchange Rate Depreciation, Budget Deficit and Inflation - The nigerian Experience by F. Egwaikhide, L. Chete and G. Falokun, Research Paper 26.

Trade, Payments Liberalization and Economic Performance in Ghana by C.D. Jebuni, A.D. Oduro and K.A. Tutu, Research Paper 27.

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Indices of Effective Exchange Rates: A Comparative Study of Ethiopia, Kenya and the Sudan by Asmerom Kidane, Research Paper 29.

Monetary Harmonization in Southern Africa by C. Chipeta and M.L. C. Mkandawire, Research Paper 30.

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Short-Run Macroeconomic Effects of Bank Lending Rates in Nigeria, 1987-91: A Computable General Equilibrium Analysis by D. Olu Ajakaiye, Research Paper 34.

Capital flight and external debt in Nigeria

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Contents

List of tables

I. Introduction

Over the last few years, many of the heavily indebted countries have also experienced heavy capital outflow or capital flights. Capital flight has become an important topic for detailed study in particular countries that are heavily-indebted. This interest arises, amongst other reasons, because of the role that external assets stored away in foreign lands can play if left in the domestic economy, and the dwindling resources from international creditors in recent times.

It is widely believed that the study of capital flight or highly indebted countries is important because of the economic problems such flights can create (see Khan, 1989). The outflow of capital can cause a shortage of liquidity in the economy and lead to the exertion of upward pressure on the interest rate. Similarly, the shortage of liquidity can cause a depreciation of the domestic currency if the authorities are operating a floating exchange rate system. If the government is defending a particular exchange rate, a loss of reserves will ensue.

When resources are being lost in the form of capital flight, there are several long-term effects. The first is that the availability of resources for domestic investment is reduced. The rate of capital formation is reduced by capital flight and this adversely affects the country's current and future prospects. Income that is generated abroad as well as wealth held abroad are outside the purview of relevant authorities and cannot be taxed. The resulting effects are a reduction in government revenue and its debt servicing capacity. Capital flight can exacerbate a balance of payments crisis if, at the time, capital outflows are taking place. Capital flight can also compound the foreign finance problems of heavily indebted countries if creditors are reluctant to give further assistance as a result of capital outflows.

The link between capital flight and growth is expressed vividly in the literature. Two of the most recent and relevant are Deppler and Williamson (1987) and Lessard and Williamson (1987). The linkage is expressed as follows by Deppler and Williamson (1987, p. 52): "the fundamental economic concern about capital flight, however, is that it reduces welfare in the sense that it leads to a net loss in the total real resources available to an economy for investment and growth. That is capital flight is viewed as a diversion of domestic savings away from financing domestic real investment and in favour of foreign financial investment. As a result, the pace of growth and development of the economy is retarded from what it otherwise would have been".

The linkage is also expressed by Lessard and Williamson (1987) in the same vein:

> The best case involves a reduction in the savings to finance domestic investment of a magnitude essentially equal to the size of the capital flight. Future growth will in consequence be lower. The worst case involves a reduction

not just in future growth possibilities but also in the current level of output by some multiple of the size of capital flights" . (p. 224).

A brief critique of the views expressed is given later.

Many reasons are often adduced for capital flight. The preponderant of the causes are economic. The economic aspect are inextricably interwoven with political causes, and favourable foreign economic incentives. The domestic macroeconomic policy distortions are mainly economic. These distortions manifest themselves in large public sector deficits, exchange rate misalignment and financial repression. Apart from these, there are also the incentives provided by foreign banks and governments. Part of the explanation for capital flight is also political. This is predicated on corruption and access to foreign funds by political leaders. It has been alleged that some political leaders, through the perquisites of their offices, siphon funds to foreign countries.[2]

Nigeria is one of the heavily-indebted countries where the issue of capital flight has been regarded as important. There is, however, no comprehensive study on the causes, measurement, magnitude and consequences of capital flight with particular reference to Nigeria.[3] Given the magnitude of Nigeria's external debt and the possible impact of capital flight on the country's real debt service capacity, a study of capital flight and external debt is essential.

This study concentrates on capital flight and external debt in Nigeria.[4] The study will focus on the definition, magnitude, determinants, mechanisms and consequences of capital flight. The analysis will also explore the possible measureable assets in which the money is held once it arrives abroad. Emphasis will be on the macroeconomic effects of capital flight within the context of economic, socio-economic and other functions.

Specifically, the study will

- Examine the size and magnitude of capital flight for the period 1970-88. Differ ent alternative methods of measurement will be examined;
- Analyze the economic (mainly macroeconomic) and other factors responsible for capital flight;
- Examine conduits through which capital flight takes place;
- Identify the major consequences of capital flight on the domestic economy;
- Examine the linkages between capital flight and external debt and draw policy conclusions.

II. The definition of capital flight

This section surveys and analyses the various definitions and measures of capital flight in the existing literature. The approach adopted is two-fold. First, is a discussion at the conceptual level, the rationale or the basis for classifying domestic outflows as capital flight instead of normal flows. The second approach is strictly empirical. The objective is to compute and analyze the alternative measures (estimates) of capital flight. The measurements are derived from a common data base for the period 1970-88 to show the variation in the estimates brought about by alternative definitions.

The use of the term capital flight arouses strong emotions. Some analysts view it as a symptom of a sick society. Some observers see capital flight as the cause of the heavily indebted countries' inability to recover from their debt problems. Capital flight is regarded by others as a pejorative description of natural, economically rational responses to the portfolio choices that have confronted wealthy residents of some debtor countries in recent years (Lessard and Williamson, 1987 p. 201). The controversy surrounding the term is due partly to the absence of a precise and universally accepted definition for it and partly because of the way the term is used between developed and developing countries. It is usual among some economists to refer to capital outflows from developed countries as foreign investment while the same activity when undertaken by the residents of a developing country is referred to as capital flight.

One of the reasons for this dichotomy is the belief that investors from the developed economies are responding to better opportunities abroad. These investors, on the other hand, are said to be escaping the high risks which they perceive at home. This interpretation makes it obvious why a lot of economists are ill-at-ease with this definition of capital flight. In general, it is believed that the investors from all countries, whether developed or developing, will base their decisions on the relative returns and risks of investments at home and abroad.

A distinction is often made also between legal and illegal transactions to distinguish between capital flight and so-called normal capital. Since illegal transactions are not reported to the compilers of the balance of payments statistics, it is difficult to know the extent to which they therefore constitute capital flight. Capital flight is capital that flees (Walter, 1986, Kindleberger, 1987). Alternatively, capital outflows in response to economic or political crises are capital flight (Husted and Melvin, 1990). Normal capital flows on the other hand, refer to flows that correspond to ordinary portfolio diversification of domestic residents.

According to Cuddington (1986, p. 2), capital flight refers to short-term capital outflows. It involves hot money that responds to political or financial crises, heavier taxes, a prospective tightening of capital controls or a major devaluation of the domestic

currency or actual or incipient hyperinflation. An expensive definition of capital flight is adopted by Morgan Guaranty Trust Company (1986, p. 13). Capital flight is defined as the reported and unreported acquisition of foreign assets by the non-bank private sector and elements of the public sector.

To classify our thoughts on capital flows, Table 1 presents a taxonomy of factors explaining international capital flows utilized by Lessard and Williamson (1987). The upper left quadrant of the table identifies various factors based on differences in economic returns across countries. In the upper right quadrant are those additional factors that deal with two-way flows - normal portfolio diversification. Most theoretical and empirical studies of capital flight have placed emphasis on the lower left and right quadrants. The factors emphasized are those that create a wedge between economic and financial returns regardless of whether they operate across the board or asymmetrically among residents or non-residents (Lessard and Williamson, 1987 p. 217).

From Table 1 it can be seen that, normal capital outflows are the ones that take place to maximize economic returns and opportunities between countries. Normal portfolio diversification takes place on the basis of differentials in economic returns. Capital flight, on the other hand, as seen from this analysis is that subset of capital outflows that are propelled by source country policies (Lessard and Williamson, 1987, p. 217).

Table 1: Taxonomy of factors explaining international capital flows

	One-way flows	Two-way flows
Economic risks and returns	Natural resources endowments	Differences in absolute riskiness of economies
	Terms of trade	Low correlation of risky outcome across country
	Technological changes	Differences in investor risk preferences
	Demographic shifts	
	General economic managements	
Financial risks and returns	Taxes (deviations from world levels)	Differences in taxes and their incidence between residents and non-residents
	Inflation	
	Default on government obligations	Differences in nature and incidence of country
	Devaluation	Asymmetric application of guarantees
	Financial repression	Different interest ceilings for residents and non-resident
	Taxes on financial intermediation	Different access to foreign exchange denomination claims
	Political instability, potential confiscation	

Source: Lessard and Williamson, 1978, p. 216

III. A review of the measures and estimates of capital flight

A number of capital flight estimates have been made over the last several years. The preponderant of these studies cover a number of countries including Argentina, Brazil, Chile, Korea, Mexico, Peru, the Philippines and Venezuela. A recent study by Rojas-Suarez (1991) covers Argentina, Bolivia, Chile, Columbia, Ecuador, Gabon, Jamaica, Mexico, Nigeria, Peru, the Philippines, Venezuela and the former Yugoslavia. These studies differ from one another in terms of methodology, country coverage, data sources and time span. The most significant of the studies on capital flight which have made impact include the studies by Dooley (1986), Dooley et. al. (1986), World Bank (1985), Morgan Guaranty Trust Company (1986), Cuddington (1986), Cumby and Levich (1987), Gulati (1985), Lessard and Williamson (1985), Khan and ul Haque (1985), Gajdeczka (1990) and, Khan (1989).

In the World Bank (1985) study, capital flight is defined as the sum of gross capital outflows and the current account deficit less increases in official foreign reserves. Cuddington (1986) takes a different approach. Capital flight is defined as short-term speculative outflows which, according to him, is the typical meaning of capital flight. It is therefore defined as short-term external assets by the non-bank private sector plus the errors and omissions in the balance of payments. Cuddington's (1986) approach is concentrated on "hot money funds" because of the fact that these funds respond quickly to changes in expected returns or to changes in risk. Variations in economic conditions are likely to affect the flow of these funds. These are the funds that are expected to return very quickly to the country when economic conditions improve.

Khan and ul Haque (1985) calculated capital flight for eight highly indebted developing countries for the period 1974-82. Capital flight is defined in two ways. First, it is defined simply as gross private short-term capital flows plus net errors and omissions in the country's balance of payments accounts. This is the same as the Cuddington estimate. The second method tries to take account of normal capital flows. Capital flight is defined as that part of the increase in external claims that yields no recorded investment income (see Dooley, 1986).

The Dooley (1986) study does tease out the normality of capital flows by specifically separating out normal and abnormal capital flows. The Dooley method seeks to measure the stock of privately-held foreign assets that do not generate income that is reported to the domestic authorities. The identified capital outflows in the balance of payments accounts are cumulated, and three adjustments are then made to capture the unreported capital flows. First, errors and omissions are added. Second, a comparison is made between the stock of external debt as reported in the World Bank data and those

reported in the balance of payments statistics. The difference between the two is added to the estimate of the increase in private sector foreign assets. The third adjustment involves the calculation of the stock of external assets needed to give the investment income in the balance of payments by using international market rates, for example, the United States treasury bill rate.

In the Morgan Guaranty Trust Company (1986, p. 13) study, capital flight is defined as the reported and unreported acquisition of foreign assets by the non-bank private sector and some elements of the public sector. Capital flight is therefore net investment inflow plus changes in gross external debt plus current account balance and change in selected gross foreign assets. Cline (1986) critiques the capital flight definition adopted by Morgan Trusty Company (1986). He argues that income from tourism and border transactions should be subtracted since these earnings are beyond the control of the relevant foreign exchange authorities. He also argues that reinvested investment income should not be considered as capital flight since this also is beyond the control of the authorities.

In what is referred to as the "mirror stock statistics", capital flight is measured as the recorded Cross Border bank deposits of non-banks by residence of depositor. These figures can be found in the statistics published by the International Monetary Fund.

Apart from utilizing these various measures, it is also possible to take cognizance of trade faking. Trade faking is the misinvoicing of exports and imports in international trade. The derived results from trade faking can be added to any of the measures to derive another set of data on capital flight.

A schematic summary of the different definitions (or type of measure), the methodology and the authors are summarized for easy reference in table 2. It should be emphasized that the different methods will yield different results not only because the definitions are different but also because of differences in data sources. The results may therefore be conflicting, and comparisons are difficult to make.[5]

Table 2: Alternative measures of capital flight

Definition	Methodology	Authors
Narrow measure	net short term capital outflow plus errors and omissions.	Cuddington
Derived measure*	part of increase in external claims that yield no recorded investment income.	Dooley
Residual measure or Sources and uses approach	Change in debt plus net foreign and direct investment minus current account deficit plus change in reserves	Chang & Cumby World Bank Pastor
Private Claims measure	acquisition of external claims by the private sector including deposit banks and the non-bank sector plus recorded errors and omission in the balance of payments.	Cornesa
Mirror stock statistics method	Cross Border bank deposit by residence of depositor	Khan & ul Haque
Change in private foreign assets+	the counterpart of the sum of net direct investment inflows, change in gross external debt, current account balance and change in selected gross foreign assets.	Morgan Guaranty Coy.

Notes: + this measure is also often seen as another aspect of the residual measure.
* this can also be called stock of unreported foreign assets measure.

IV. Alternative measures of capital flight for Nigeria

We present in this section alternative measures of capital flight for Nigeria. There are a number of objectives behind the calculation. The primary objective which is modest is to show the range of capital flight implied by the alternative definitions of capital flight that are offered. The additional objective is to examine the extent to which capital flight is continuous or episodic. In other words, it is the objective of the calculation to show whether heavy outflows tend to concentrate in certain years, and small flows in others. That finding in itself may suggest that capital flights are associated with particular economic/political events. In the realm of economic/political events, this may be associated with poor macroeconomic management, inflow of large foreign exchange from export (export boom), and civilian/military governance etc.

As mentioned earlier, there is no precise and universally acceptable way of measuring capital flight. What is required is some judgement taking due cognizance of the objectives for measuring capital flight and the economic/social environment of the country for which capital flight is being measured. In measuring capital flight for Nigeria, a number of approaches are taken in this study. The first approach recognizes that capital flight is speculative capital. It is hot money fund on the wing. It is one that is expected to respond to the various forms of distortion mentioned earlier. Taking this approach of course means that capital flight refers essentially to capital export by the private nonbank sector, although in some cases banks and official entities may also engage in it (Cuddington, 1986, p.2). Since capital flight is essentially concealed, they show up in the error and omissions of the balance of payments entry. Thus, capital flight is defined as the sum of short-term private capital flows plus errors and omissions in the balance of payments statistics. The results of the calculations are shown in Table 3.

As can be seen, some of the figures are negative. The intuitive explanation is that the negative signs cannot connote capital flight. As explained in the Cuddington study (1986, p. 5) the figures reflect capital flight net of unrecorded capital inflow.

Essentially however, the years with negative signs are better perceived as years of capital repatriation or capital inflow. Thus in the period 1972-89, the total capital inflow was US $7,573 million. Out of this total sum, US $7,362 million (97%) came in between 1972-78, the period usually associated with Nigeria's period of oil wealth. During the political era, that is the period in which civilian government was in power, the capital inflow was US $270 million. Thus, using this technique of calculation, one can see the episodic nature of capital flight. As a result of the buoyant economy associated with the oil boom years, the macroeconomic environment can be said to be favourable to capital inflows.

Table 3: Capital flight, 1970-89 (US$ million)

1970	134.0
1971	205.0
1972	119.0
1973	-177.0
1974	48.0
1975	-42.0
1976	5.0
1977	-231.0
1978	43.0
1979	211.0
1980	-673.0
1981	106.0
1982	149.0
1983	-63.0
1984	-642.0
1985	-2014.0
1986	-249.0
1987	-953.0
1988	-1315.0
1989	-1895.0
Cumulative Total:	
1972-78	-7362.0
1972-89	-7573.0
1979-83	-270.0

Sources: Data used in calculation from IMF (1990) *IFS Statistics Yearbook.*

Using approaches by Cumby and Levich (1987), Varman (1989) and Varman-Schneider (1991), we calculate from balance of payments statistics a number of capital flight estimates for Nigeria using various methods shown in Table 4. The data is drawn mainly from the International Financial Statistics Yearbook, the IMF Balance of Payments Statistics Yearbook and the World Bank Debt Tables. The result of the calculation is shown in Table 5. This is the first time that this is done for Nigeria. There has been no similar calculation elsewhere using the different definitions shown in Table 4.

Table 4a: Notations

A.	Current account balance
B.	Net foreign direct investment
C.	Private short term capital outflows
D.	Portfolio investment
E.	Banking system foreign assets
F.	Changes in reserves
G.	Errors of omissions
H.	Changes in debt
I.	IMF credit
J.	Travel credit
K.	Reinvested FDI income
L.	Other investment income
M.	Counterpart items

Table 4b: Capital flight estimates

World Bank	=	(H + B + A + F)
Erbe	=	(H + B + A + F)
Morgan	=	(H + B + A + E + F)
Cline	=	(H + B + A + E) - (J + K + L)
Duwendag	=	(H + B + A + F + G + I + M)

Source: Lessard and Williamson, 1987, p. 38.

Table 5: Capital flight: different estimation methods (US$ million) 1971-1989

YEAR	ERBE & WORLD BANK	MORGAN TRUSTY	CLINE	DUWENDAG
1972	106.40	477.28	453.37	127.70
1973	636.10	1,265.38	1,228.03	551.75
1974	325.00	5,995.00	5,824.27	450.88
1975	119.80	5,988.60	5,474.48	148.04
1976	124.80	5,524.44	5,044.21	187.40
1977	2,490.00	7,021.86	6,554.79	2,111.95
1978	508.40	2,695.20	2,309.48	235.23
1979	-86.30	5,659.54	5,370.07	601.59
1980	2,713.30	12,974.11	12,234.36	2,590.79
1981	2,132.30	6,145.22	5,267.31	1,345.14
1982	-3,805.80	-2,230.87	-2,230.87	-3,812.09
1983	2,016.10	3,098.82	2,893.61	1,991.64
1984	-169.80	1,594.72	1,494.72	182.81
1985	3,569.40	5,385.40	5,272.14	2,994.58
1986	5,502.90	6,841.80	6,592.39	5,138.37
1987	5,874.60	7,522.20	7,398.83	5,462.11
1988	1,043.80	2,479.12	2,385.12	902.80
1989	-299.70	2,212.46	2,102.46	-369.70
Cumulative Totals				
1972-79	4,224.2	34,627.3	32,258.7	4,414.5
1972-89	22,801.3	30,650.3	75,330.3	20,841.0
1979-83	2,969.6	25,646.8	23,196.0	2,717.7

Source: Calculated using formula in Table 2.

The differences in the magnitudes of the results using various definitions of capital flight are not surprising given the differences in definition. The similarities and differences can be classified according to different periods. In 1970-73 for example, the World Bank (1985) and Erbe (1985) estimates were generally lower than the other three estimates. The amplitude of capital flight for the period 1985-87 were, however, not too different in the four measures. What is important is the cumulative sums of capital flight for given specific years.

Of the four approaches, the Duwendag (1987) approach consistently gave the lowest estimate in all cases. A line graph of the approaches reveals that the Erbe World Bank and Duwendag approaches are close as shown by the variations of these figures just as the Morgan Trusty and Cline are also very close in terms of the amplitude of the figures.

It is clear that the different results obtained derive from the different materials that go into the calculation of capital flight. It is also clear that the approaches yield a significant amounts of capital flight over the period covered.

In the period 1972-89, the amount of capital flight varied from US $20,841 million in the Duwendag method to a high amount of US $80,650 million. It is not surprising that the Morgan Trusty and Duwendag measures are exceedingly high because of the variables involved in the measurement. Given the relative importance of capital in capital-scarce economies like Nigeria, the most relevant definition of capital flight which unitizes the "sources and uses" approach is more appropriate. This is because it implicitly assumes that any outflow is abnormal because of the scarcity value of capital in developing countries. Concentrating on the World Bank definition therefore implies that between the period 1972-79, the total amount of capital flight in Nigeria was US $22,801 million. This figure would be utilized later for the purposes of comparison with the increases in external debt.

Using the World Bank approach as the most appropriate in this case, the years 1979, 1982, 1984 and 1989 were years of capital inflow. As to whether capital flight is episodic, it can be seen that during the period 1972-78, the cumulative capital flight was US $4,310. This was a period of military regime, and a period that coincided essentially with the peak in Nigeria's oil wealth syndrome. The total amount of capital flight during the civilian regime (1979-83) was US $2,970 million, that is 69% of the military regime! It is difficult, however, to come to any conclusion as to whether capital flight actually occurred more under a military regime than a civilian regime because the economic fortunes of Nigeria were not the same in the two periods.

The third approach used is what was referred to earlier as the mirror stock statistics method. This method draws on international banking statistics to evaluate the amount of assets held abroad by the residents of developing countries. This method of estimating capital flight has been used by Khan and ul Haque (1987). It is particularly useful, as we shall see, in determining the minimum level of assets held abroad. For this method, the recorded statistics by the IMF are the Cross Border Bank deposits of nonbanks by residence of depositors which for Nigeria is shown in Table 6. The statistics for Nigeria started in 1981.

The estimate of capital flight using the Cross Border Bank Deposit of Non-banks by Residence of Depositors is shown in Table 7. This amount shown in table 6 represents stocks per year. When capital flight is defined as the increase over the previous year, we find that the amount is relatively very small. In all cases, the amount represents the lowest of all the estimates.

Table 6: Cross border bank deposits on nonbanks by residence of depositor: Nigeria

	$ million
1981	1,540
1982	1,380
1983	1,380
1984	1,170
1985	1,500
1986	1,680
1987	2,300
1988	1,960
1989	2,790
Cumulative Totals:	
1981-89	15,700

Sources: *IMF Yearbook*, 1989, 1990

Table 7: Nigeria: Cross border deposit of nonbanks by residence of depositor, 1981-1982

Year	Amount of deposit (US$ million)	Change in Cross border deposit (US$ million)	Cross border deposit/external debt	Cross border deposit/GNP
1981	1540		0.128	.016
1982	1380	150	0.108	.015
1983	1380	0.0	0.075	.016
1984	1170	-210	0.063	.013
1985	1500	230	0.078	.017
1986	1680	180	0.073	.037
1987	2300	620	0.077	.096
1988	1960	-350	0.063	.068
1989	2790	840	0.085	.101
Cumulative Totals:				
1981-89	15,700	1460		

Source: *IFS Year Book 1989*, IMF, Washington, DC
IFS Year Book 1990, IMF, Washington, DC
World Bank, *World Debt Tables 1989-1990*

There are a number of explanations why this cannot be an adequate measure of capital flight. First, some funds are held in deposits outside the major financial centres. Indeed, the nationality of the depositor in some foreign banks is never revealed. The most often

cited example is that of Swiss bank accounts where secret codes are maintained to conceal not only the identity of the depositor, but also their nationality. Second, substantial amounts which are not revealed are held in assets other than bank deposits. Some such assets are held in other financial assets: equities, bonds, treasury bills, etc. and physical assets. As a result of the above, the figures underestimate capital flight.

In a large sense, however, these amounts are indicative of the money which could have been utilized domestically. Such deposits are better seen within the context of other macroeconomic variables such as external debt and GNP shown in Table 7. We find that the Cross Border Deposit/External Debt Ratio varied from 6.3% to 12.8%. The Cross Border Deposit as a ratio of GNP varied from 1.3% to about 10% for the period shown.

V. Causes of capital flight

The causes of capital flight as discussed in the literature are many. The various factors can be grouped under relative risks, exchange rate misalignment, financial sector constraints, fiscal deficits and external incentives (Khan, 1989) and disbursement of new loans to LDCs (Cuddington, 1987). These are, no doubt, economic factors. There are, however, other non-economic factors which, though important, are often ignored. These include corruption of political leaders and extraordinary access to government funds. These factors are now discussed.

In a decision-making process on investment, the wealth holder looks at the various risks. There are certain inherent characteristics of developing countries which make risks attached to investments larger than those of developed countries. Using the concept of expropriation risk within the context of an intertemporal optimizing model, Khan and ul Haque (1985) show that any increase in risk in a rational expectations setting would tend to increase the outflow of private capital from the domestic economy into foreign countries where investments are less risky. This expropriation risk could include a variety of distortions such as differences in taxes and political instability resulting in possible destruction of private property. Eaton (1987) builds on the Khan-Haque model by relating the risk of expropriation of capital owned domestically, which is defined, especially in this case, as higher taxation to public and publicly guaranteed foreign debt. The tax obligation arising from an increase in external debt can lead to capital flight. The flight of one investor leads to a rise in the potential tax obligations of other remaining investors. This also may create the incentive for other investors to move their assets abroad.

It is generally agreed that one of the principal determinants of capital flight is exchange rate misalignment. It has been amply demonstrated in the empirical analysis of several studies (Dornbusch, 1985, Cuddington, 1966, Lessard and Williamson, 1987, Pastor, 1989 and Pastor, 1990 that the real exchange rate plays a significant role in the direction and magnitude of capital flight from highly-indebted countries. Under normal circumstances, if a currency depreciation is expected, domestic wealth owners would shift out of domestic assets into foreign assets. In general, it is difficult to measure precisely exchange rate expectations. It is safe, however, to assume that if a currency is overvalued, economic agents would expect the currency to be devalued in the future. Holding firm to this expectation would cause residents to avoid the potential capital loss by converting into foreign claims.

Financial sector constraints can lead to capital flight. It is well known that narrowness of the capital and money markets is a feature of developing economies. These markets therefore provide only a limited variety of financial instruments in which wealth can be held. There is also in many developing countries the lack of full or credible deposit insurance on assets that are held in the domestic banking sector. As a result of

these constraints, residence of developing countries look abroad to invest their wealth.

Additionally, there are extensive controls on interest rates and other aspects of financial market behaviour in developing countries. Government policies in the financial sector have resulted in nominal interest rates that are far below the rates on comparable foreign financial instruments. In such situations, it is expected that investors will seek alternative assets that will yield not only positive but higher returns.

It has been shown by Dornbush (1985) that capital flight is typically accompanied by fiscal deficit. When a rising fiscal deficit is financed through the printing of money, it leads to inflationary pressure. To avoid the erosion of their monetary balances by inflation, moving out of domestic assets is one way of avoiding inflation tax. When fiscal deficit is financed through bond sales, domestic residents may expect that at some future date their tax liabilities may increase to pay for the national debt. This would encourage domestic investors to move their assets to foreign countries to avoid potential tax liabilities.

Ize and Ortiz (1987) formalized the link between deficit financing and capital flight. In the Ize-Ortiz model, capital flight is related to the overall financial solvency of government. Insolvency and default risks created by fiscal deficit appear explicitly as the determinants of capital flight.

A number of external factors influence the flight of capital, generally in terms of the opportunities available outside the country, including attractiveness of interest rates, and the range of financial instruments in which wealth can be held. This is aptly put by Walter (1986, p. 120): 'flight implies havens, and havens take the form of national status that provide an attractive range of real and financial assets to foreign based investors, political and economic stability, a favourable tax climate for non-residents and various other attributes that generally are the obverse of conditions triggering capital flight in the first place. On some types of deposits, withholding taxes are not taken from non-resident deposits. Certain countries allow secret accounts which are attractive to some wealth owners and can facilitate illegal transactions and tax evasion.

As a result of the principle of national sovereignty, it is difficult for foreigners to have inside information on asset holdings abroad. One safeguard is the *domestic bank secrecy law* which bars both the national and foreign authorities alike. The other is the *blocking statute* which effectively prevents the disclosure, copying, inspection or removal of documents located in the host country unless there is an order from or by foreign authorities (Newcomb and Kohler, 1983).

Some authors argue that capital inflow in the form of disbursements to developing countries are a major cause of capital flight. In the case of public sector borrowing, the availability of foreign exchange increases the potential for graft and corruption. It is, therefore, logical to assert that for many developing countries, (Nigeria inclusive), abuse of official power can lead to capital flight. There are anecdotal evidences that highly placed public officials using the paraphernalia of their office siphon some of the money under their care to foreign countries solely for their own private use.

In Nigeria's case, it is difficult to rank the various causes of capital flight in any order of importance. It is important, however, to point out that a poor macroeconomic policy stance has resulted in all kinds of distortions. At the same time, the role played by

other factors such as access to foreign exchange through various perquisites of offices and consequent possible abuse cannot be underestimated.

VI. The mechanisms of capital flight

There are many ways in which capital flight can occur. The conduits are many and it is almost impossible to develop an exhaustive inventory of channels. This section discusses the most significant channels for Nigeria.

First, transfers can take place through cash or monetary instruments. These are usually in the form of either foreign or domestic currency, travellers cheques or other cheques. In the early 1970s, stories abounded about Nigerian currency being carried out of the country and exchanged in big financial centres like London and New York to be exchanged legally for other currencies at current market rates. Inspite of the present economic predicament, there are still some African countries where the naira is exchanged for other currencies in the course of trade.

Second, capital flight can take place through bank transfers from a local affiliate of a foreign institution to a designated recipient abroad. This is possible at the market rate where no constraints or restrictions are in place. Transfers can still be possible in the face of exchange controls but possibly at a less favourable rate. The history of the development of banking institutions in Nigeria shows the existence of local affiliates of foreign banks. That transfers of the type mentioned have been taking place in Nigeria cannot be in doubt. It is reasonable to claim, however, that such transfers may not be available for incomes that are illegally generated.

Another method of transfer is through precious metals and collectibles, including works of art. Local currency is converted into gold, silver or other precious metals, precious stones, jewellery and similar assets that cannot only be abroad but that will also be able to retain their value. The sale value of these are usually high in foreign currency. Usually, governments tend to restrict or prohibit imports and exports of any such items. Such international transfers therefore usually involve smuggling, with its inherent risks.

The fourth mechanism of transfer is through false invoicing of trade transactions, where export ad import invoices are either issued that are either different from agreed prices or faked. Estimates of this type of transfer are known to have been undertaken by Bhagwati (1974), Naya and Morgan (1974) as well as Bhagwati, Krueger and Welbulswasdi (1974). Recent analysis by Gulati (1987) shows that there can be systematic over-invoicing and under-invoicing of exports or imports. The expectation in the case of capital flight is that exporters will systematically engage in under-invoicing while importers over-invoice and in the process derive foreign exchange that is outside the control of the foreign exchange authority. The procedure for doing this is that the foreign supplier issues an invoice that is greater than the agreed price of the product. The importer on receipt of the necessary foreign exchange remits it to the foreign supplier who then keeps the difference in a bank for the use of the importer. On the export side, the invoice issued is for an amount in foreign currency that is less than the agreed price.

The foreign buyer places the difference between the invoice price and the agreed price in a foreign bank account of the exporter and remits the invoice amount. It is this amount of money that is surrendered to the Central Bank for local currency at the prevailing official exchange rate. To measure the magnitude of invoice faking, partner country analysis is generally undertaken.[5]

Capital flight through false trade invoicing is generally applicable to the local affiliates of multinational companies, and owners of business engaged in international trade. It is known in some cases that false invoicing can be multiplied through a practice called round tripping. The process is one in which foreign currency assets are accumulated abroad at the official exchange rate via trade misinvoicing (via over - or under-invoicing). Some of the assets are repatriated in the form of cash or other monetary instruments which are converted to local currency at a premium in the local parallel market. Whatever gain is made in local currency can then form the basis for further false-invoiced transactions. This in effect is arbitrating the official and parallel-market exchange rates (Walter, 1986, p. 113).

A fifth method of transferring money abroad is through the black market, until recently a thriving source of transferring funds abroad. The amount of money transferred this way is difficult to estimate.

A sixth vehicle through which capital can be transferred overseas is through commissions and agents' fees, which are paid by foreign contractors into the foreign bank accounts of residents.

VII. The link between capital flight and external debt

Several authors have pointed out the seriousness of capital flight for debt accumulation in LDCs. Indeed, some studies have shown that the ease with which capital flight takes place is related to the availability of foreign exchange. It is more appropriate, however, to examine the macroeconomic relationship between external debt and capital flight.

Within this context, the discussion can be along two lines. The first analyzes strictly the relationship in terms of causality between external debt and capital flight, while the second considers issues related to the various macroeconomic issues with regards to external indebtedness and capital flight. Beginning with the first, we can analyze the relationship between external debt and capital flight. From the literature, there are two kinds of linkages between external debt to capital flight. The first linkage runs from external debt to capital flight while the second runs from capital flight to external debt. Each of the two groups can be subdivided into two. Thus, the direct linkage can be divided into four major groups on the basis of whether the direction of causality runs from debt to capital flight or vice versa or whether one simply provides the motive for the other or whether it provides the means as well.

Debt-driven Capital Flight: If consequent to external borrowing, residents of a country are motivated to move their assets to foreign countries, we have debt-driven capital flight. Capital flees or leaves the country in response to attendant economic circumstances directly attributable to external debt itself. The attendant economic circumstances leading to debt-driven capital flight are expectations of exchange rate devaluation, or fiscal crisis, possibility of a crowding out domestic capital and avoidance of taxes and ex-propriation risk.

Debt-fuelled Capital Flight: In this case, the inflow of capital provides both the motive and the resources for capital flight. In the case of debt-fuelled capital flight, borrowed funds are themselves transferred abroad. There are two processes through which money can be transferred. First, government can borrow money and this is sold to domestic residents who transfer these money abroad through legal or illegal means. In this case, government is the provider of foreign exchange. Second, government on-lends funds to private borrowers through a national bank. The borrowers in turn transfer part or all the capital abroad. In this case, the external borrowing provides the necessary fuel (the resources) for capital flight.

We can now turn to the causation in the other direction. There is on the one hand a case which is purely motivational, while on the other hand, we have a case where capital flight provides the resources which re-enters the country. These are referred to as "flight-driven external borrowing" and "flight fuelled external borrowing", respectively.

Flight-driven External Borrowing: This situation develops when as a result of

capital that has left the country there is a gap which needs to be filled in the domestic economy. Consequently, there is a demand for replacement on the part of both the government and the private sector. The reasons why external creditors are willing to meet this demand is attributable to different risks and returns facing resident and non-resident capital.

Flight fuelled External Borrowing: In this situation, a domestic currency leaves the country but re-enters in the guise of a foreign currency. What happens is the "flight capitalist seeks to arbitrage the yield and risk differentials between resident and external capital, by engaging in a series of transactions sometimes known as "round tripping" or "back to back loans". Resident capital is dollarised and deposited in an overseas bank, and the depositor then takes a "loan" from the same bank (for which the deposit may serve as collateral)".

The second set of arguments in this connection state that when capital flees a country, that amount of money is lost to the potential investment in productive domestic activity. This would have earned foreign exchange, if such investments were made in the tradeable sector of the economy. One general popular argument calls for either an incentive to return funds held abroad by domestic residents or a significant reduction in the outflow of such funds. Accordingly, the heavily indebted countries would be in a better position for at least two reasons. The first is that the funds so returned can be used to boost domestic investments and thereby enhance debt servicing capacity. Thus, the issue of capital flight is germane to the issue of real debt servicing capacity. This is very important in the case of Nigeria because of the high debt service ratio.

Second, a heavily indebted country that restricts capital flight would be in a better position to adjust to any subsequent fall in external funding. These two arguments are no doubt over-statements of the issues involved in capital flight. The impression is given that economic opportunities are equal between countries (which is not the case) and that the adoption of appropriate macroeconomic policies can release more funds domestically for investment purposes. Most of the arguments in the area are being increasingly linked to the issues of stabilization and growth (see for example, Dornbusch, 1990). What is often ignored in the argument, however, is that it is possible for resources to be returned to the domestic economy in the form of financial holdings (fixed deposits etc.), and not in machines and equipment for production or investment in the tradable sector.

There are other linkages between capital flight and external debt. One of the most popular hypothesis is the debt overhand argument which states that large external debt discourages domestic investment. This is based on the fear that the tax liability of domestic investors will rise in the future.

Another relationship is that of internal transfer, where resources are transferred from the private to the public sector to finance government expenditure. As foreign debt increases, the internal transfer problem will also increase in magnitude, fostering capital flight.

A large external debt is a source of instability for no other reason than the fact that the outcome of the debtor creditor position is hard to predict. As the fiscal burden of high external debt increases, a potentially unhealthy struggle for scarce resources within

the economy is put in motion.

A better understanding of the relationship between capital flight and external debt can be gained by looking at some important statistics (see Table 8). Utilizing the capital flight derived earlier, the cumulative sum for the period 1972-89 is US$2280.1. The cumulative sum of the change in debt for the same period is US$32181. Thus, the ratio of capital flight to changes in external debt is about 71% for the entire period. On a year by year analysis, some selected periods have been chosen. For the years 1977, 1980, 1985 and 1986, capital outflows exceeded foreign debt accumulation indicating the depletion of domestic resources.

It is significant to note that when the capital flight/ change in external debt was as high as 352% in 1985, the year preceding the adoption of the structural adjustment programme in Nigeria, the investment/GDP ratio was 7.5%.

Important insights can be gained by looking at the statistics of changes in external debt and those of investment and growth. In periods of high growth rate in external indebtedness as in the periods 1977-81, the gross investment as a percentage of GNP was at its highest range of 20 - 27% for the entire period. Thus, increases in debt accumulation had effects on investment. But the effect it could have had on growth in GDP was counteracted by capital flight. When the capital flight/change in debt ratio was 69%, 36%, 352% and 122.5%, growth rates were negative 6%, 4%, 4% and 48%, respectively.

These findings will seem to lend credence to the general belief that capital flight has deterrent effects on the growth of the economy. The validity of such a statement and its definitiveness can only be based on rigorous empirical analysis, which is beyond the scope of this study.

Table 8: Nigeria: external debt, capital flight, growth in GNP and some ratios (US$ million)

	External Debt	Capital Flight	Change In External Debt	Capital Flight External Debt	Growth In GNP	Gross Invest-ment of GDP	Capital Flight Δ Debt
	(1)	(2)	(3)	(4)	(5)	(6)	
1972	732	106.4	81	14.5	15.0	18.3	
1973	1,205	636.1	473	52.8	12.2	19.4	
1974	1,274	325.0	69	25.5	74.1	14.6	
1975	1,143	119.8	-131	10.5	20.8	21.8	
1976	906	124.8	-237	13.8	22.8	27.1	
1977	3,146	2,490	2,240	79.1	13.7	26.7	111.2
1978	5,091	508.4	1,945	10.0	9.2	24.8	
1979	6,235	-86.3	1,144	-1.4	25.5	20.1	26.1
1980	8,934	2,713.3	2,699	30.4	29.0	20.5	100.5
1981	12,018	2,132.3	3,084	17.7	-5.6	21.4	69.2
1982	12,954	-3,805.8	936	29.4	-2.4	15.4	
1983	18,539	2,016.1	5,585	10.9	-3.5	11.4	36.1
1984	18,537	-169.8	-2.0	0.09	3.5	6.4	
1985	19,551	3,569.4	1,014	18.3	-3.7	7.5	352.0
1986	24,043	5,502.9	4,492	22.9	-48.2	9.7	122.5
1987	31,193	5,814.6	7,150	18.8	-49.2	11.4	82.2
1988	31,947	1,043.8	754	3.2	20.7	12.3	
1989	32,832	-299.7	885	0.9	-1.2	12.5	
Cummulative Total							
1972-89		32,801.3	32,181				

Ratio of Capital Flight to Change in External Debt (%) = 70.9

Sources: IMF: *IFS Yearbook*, IMF Washington, D.C.; *Debt Tables*;
World Bank, *World Development Report*, 1990, World Bank, Washington, D.C.

VIII. Conclusions

This paper has addressed general issues at capital flight. Specifically, we have tried to estimate the magnitude of capital flight using different alternative methods. We have also discussed the causes, the mechanisms of capital flight and the link between capital flight and external debt, among others.

A number of conclusions can be drawn. The first is that there is no generally accepted definition of capital flight. Given the institutional framework and the nature of the economy, we have been able to adopt a definition and a measure of capital flight. Second, a significant proportion of total capital flight is recorded in the balance of payments and debt statistics. The implication of that, however, is that the adequacy of the measure is dependent on the accuracy of the items in the balance of payments statistics, and debt data. To the extent that these statistics are not accurate, their usefulness is in doubt.

Other important vehicles of capital flight, for example, are left out of the present estimates. Such vehicles include smuggling currency movements and invoice faking. There are possible indicators that a lot of money is transferred through trade invoice faking. In general, since trade faking add to capital flight, the underinvoicing of exports and over-invoicing of imports, the two should be added for the net effect of trade faking on capital flight. To the extent that underinvoicing and overinvoicing exist in Nigeria, the capital flight is underestimated. Third, if a large amount of wealth resides abroad, tax revenues are adversely affected and policy variables cease to be representative of the real situation.

Fourth, even though domestic policy distortions can lead to capital flight, the role of access to political offices and perquisites of the office cannot be ignored. Indeed, many people who have transferred money abroad and belong to this category do so not in the course of business but as a result of access to foreign exchange. The extent to which the provision of domestic incentives and the elimination of policy distortions will bring a reversal of capital flows is not precisely known. What is certain, however, is that political and macroeconomic stability play big roles in the flow of capital. A suitable and stable macroeconomic environment that eliminate domestic macroeconomic policy errors will ensure that the economic functions which bring about capital flight are eliminated. Of significance in the area of policy errors that propel capital flight are inflation, exchange rate misalignment, fiscal deficit, financial repression. The issue of corruption is more difficult for prescriptive purposes. The only safe thing that can be said is that there is need for attitudinal changes which require serious commitment to honest government on the part of political office holders. Nigeria has a domiciliary account where foreign currencies can be kept. It is possible that the availability of this avenue may be important in possible repatriation of some foreign funds. Its usefulness in attracting large sums of money to the country under the present system is, however, limited.

Notes

1. The revision of this paper came about four years after the original paper was presented. It has therefore benefitted from my subsequent thought and writings on the same issue. No attempt has, however, been made to enlarge the scope and coverage of the original paper despite suggestions to that effect by one anonymous reviewer. I thank the anonymous referees for their comments and suggestions which I found useful. One of the reviewers asked that I ensure that this piece be up to the 'high quality standard' of my World Bank Research Paper Series. I hope I have put in what is necessary in this paper to meet the standard. The usual caveat applies: I am solely responsible for any "errors and omissions"!

2. For the developing countries, examples often cited included the late Marcos of the Philippines and the leaders of Haiti and Zaire. In Nigeria, some powerful political members who fled the country after the military coup of 1983 are alleged to belong to the Marcos group.

3. The available studies that make reference to Nigeria are limited. The comprehensive study of Rojas-Suarez (1991) lumped Nigeria in the group of heavily indebted countries. The study did not estimate capital flight for each country.

4. A recent survey of the various methods undertaken by Deppler and Williamson (1987) lists only four of the methods discussed here.

5. While we recognize the capital flight that can arise from invoice faking, this is the topic of a future study.

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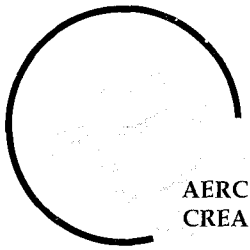

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